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(54) Title: A MAGNESIUM HALIDE SUPPORT FOR USE AS A COMPOSITION OF A CATALYST FOR THE OLEFIN POLYMERIZATION, AND METHOD OF PREPARATION OF THE MAGNESIUM HALIDE SUPPORT

(57) Abstract: An aspect of the present invention is a preparation of a magnesium halide support for using as a composition of a catalyst in an olefin polymerization, wherein the magnesium halide support is a solid substance prepared by an aliphatic alcohol non-ionic surfactant, preferably is ethoxylated aliphatic alcohol. Another aspect of the present invention is a method for the preparation of the magnesium halide support for using as the composition of the catalyst in the olefin polymerization comprising the following steps: (a) adding a magnesium halide compound into an organic solvent, and heating; (b) cooling down the mixture from (a) rapidly to the room temperature or lower in the inert organic solvent and the aliphatic alcohol non-ionic surfactant; and (c) washing the magnesium halide with the anhydrous inert organic solvent, and drying, wherein the aliphatic alcohol non-ionic surfactant is ethoxylated aliphatic alcohol.

